

List of All Chemicals

P Eruca sativa (Brassicaceae)

Common name(s)

Rouka (Arab.; BOU); Thorfel (Berber; BOU); Grahagna (Sansk.; KAB); Jambeh (Iran; DEP; KAB); Mulai (Loralai; KAB); Arugula (Eng.; FAC; USN); Gargir (Arab.; Hebrew; BOU); Siddartha (Sansk.; DEP; SKJ); Ugragandha (Sansk.; KAB); Jambho (Sind.; DEP); Achnef (Berber; BOU); Tantuka (Sansk.; KAB); Sidharta (Sansk.; KAB); Euzomon (Greece; EB54:155); Tuverika (Sansk.; KAB); Tanakfail (Berber; BOU); Sarshapa (Sansk.; KAB); Jamba (India); Salad Rocket (Eng.; USN); Tantubha (Sansk.; KAB); Djerdjir (Arab.; BOU); Ai'sha (Arab.; BOU); Daradharsha (Sansk.; KAB); Sahwan (Nwp.; KAB); Ackerrauke (Ger.; MAD); Kibana suzushiro (Jap.; TAN); Shwetsursha (Bengal; SKJ); Roquette vraie (Fr.; BOU); Oroth (Bible; EB52:394); Horf (Arab.; BOU); Ruke (Ger.; USN); Bhutaghna (Sansk.; SKJ); Roquette cultivee (Fr.; KAB); Jambeho (Sind.; KAB); Kadamba (Sansk.; KAB); Rucheta (Malta; KAB); Bimbata (Sansk.; KAB); Garden Rocket (Eng.; USN); Roqueta (Sp.; USN); Roquette (Eng.; Fr.; BOU); Gery (Arab.; BOU); Aruca (Malta; KAB); Sarishapa (Sansk.; KAB); Ai'afein (Arab.; BOU); Olrauke (Ger.; USN); Taramira (India; Nwp.); Shiltam (Arab.; BOU); Rugula (Eng.; USN); Assu (Punjab; SKJ); Roquette des jardins (Fr.; KAB); Tara (Nwp.; Punjab; KAB; SKJ); Rabano silvestre (It.; Port.); Bou kahli (Arab.; BOU); Rocket (Eng.; BOU); Eihukan (Iran; NAD); Eruca (Malta; KAB); Rawk (Arab.; BOU); Kerkas (Arab.; BOU); Chara (Kumaon; DEP); Tira (Nwp.; DEP; KAB); Baglet (Arab.; BOU); Rocket Salad (Eng.; USN); Sidhaprayojana (Sansk.; KAB); Rucola (It.; Malta; Sp.); Suffed shorshi (Bengal; DEP); Mandao (Afg.; DEP; KAB); Rajika (Sansk.; KAB); Izgin (Turkey; EB54:155); Dua (Kumaon; DEP); Rajakshavaka (Sansk.; KAB); Rakshitaphala (Sansk.; KAB); Senfrauke (Ger.; USN); Kadambaka (Sansk.; KAB); Lalu (Nwp.; KAB); Piao erh ts'ai (Chi.; TAN); Lamba (India; USN); Duan (Nwp.; KAB); Sfed sarson (Hindi; MPI); Oruga comun (Sp.; USN); Jamnia (Punjab; DEP); Ruca (Catalan; KAB)

How used

Medicinal

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Chemical	Part	Low PPM	High PPM	StdDev	*Reference
PROTEIN	Seed	296000.0	374000.0	1.25	*
FAT	Seed	225000.0	351000.0	0.45	*
ERUCIC-ACID	Seed	75150.0	161460.0	0.89	*
Activities (2)					
Antitumor					
Lubricant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.				
LINOLENIC-ACID	Seed	32850.0	69150.0	0.63	*
OLEIC-ACID	Seed	22700.0	62475.0	-0.47	*
Activities (18)					
5-Alpha-Reductase-Inhibitor					
Allergenic					
Alpha-Reductase-Inhibitor					
Anemiagenic					
Antiallopecic					
Antiandrogenic					
Antiinflammatory					
IC50=21 uM					
Antileukotriene-D4					
IC50=21 uM					
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.				
Choleretic 5 ml/man					
Dermatitigenic					
FLavor FEMA 1-30	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry				
Hypocholesterolemic	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)				
Insectifuge	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.				
Irritant	Merck 11th Edition				
Percutaneostimulant	Seki, T., Toeda, C., Kawaguchi, T., Juni, K., Sugibayashi, K., and Morimoto, Y. 1990. Enhanced Transdermal Delivery of Zidovudine in Rats and Human Skin. Chem. Pharm. Bull. 38(11): 3086-3089, 1990.				
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry				
Propecic					
LINOLEIC-ACID	Seed	18675.0	53700.0	-0.46	*

Activities (27)

5-Alpha-Reductase-Inhibitor

AntiMS Economic & Medicinal Plant Research, 6: 189.

Antiacne

Antialopecic

Antianaphylactic

Economic & Medicinal Plant Research, 6: 189.

Antiandrogenic

Antiarteriosclerotic

Antiarthritic

Economic & Medicinal Plant Research, 6: 189.

Anticoronal

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Antieczemic

Economic & Medicinal Plant Research, 6: 189.

Antifibrinolytic

Economic & Medicinal Plant Research, 1: 53.

Antigranular

Antihistaminic

Economic & Medicinal Plant Research, 6: 189.

Antiinflammatory IC₅₀=31 uM

Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).

Antileukotriene-D4 IC₅₀=31 uM

Pizzorno, J.E. and Murray, M.T. 1985. A Textbook of Natural Medicine. John Bastyr College Publications, Seattle, Washington (Looseleaf).

Antimennorrhetic

Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.

Antiprostatic

Science News, 146: 421.

Cancer-Preventive

Science News, 146: 421.

Carcinogenic

Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)

Comedolytic

Economic & Medicinal Plant Research, 6: 189.

Hepatoprotective

Science News, 146: 421.

Hypocholesterolemic

Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.

Immunomodulator

Metastatic

Science News, 146: 421.

Insectifuge

Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.

Metabolic

Propecic

ASH

Seed -- 48000.0 0.0 *

EICOSENOIC-ACID

Seed 16425.0 34400.0 1.54 *

PALMITIC-ACID

Seed 9000.0 18250.0 -0.32 *

Activities (13)

5-Alpha-Reductase-Inhibitor

Antialopecic

Antiandrogenic

Economic & Medicinal Plant Research, 1: 53.

Antifibrinolytic

Antioxidant IC₄₀=60

Favor Fema 1 Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

Hemolytic

Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.

Hypercholesterolemic

Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)

Lubricant

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Nematicide

Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.

Pesticide

Propecic

Soap Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

BEHENIC-ACID

Seed 4725.0 7370.0 0.01 *

Activities (1)

Cosmetic Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

STEARIC-ACID

Seed 2900.0 6600.0 -0.42 *

Activities (8)

5-Alpha-Reductase-Inhibitor	
Cosmetic	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.
FLavor FEMA 2-4,000	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Hypocholesterolemic	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. <i>CRC Handbook of Lipids in Human Nutrition.</i> CRC Press. Boca Raton, FL. 233 pp.)
Lubricant	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Propeptic	
Suppository	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.

LIGNOCERIC-ACID

Seed 4050.0 6320.0 0.28 *

Activities (1)

Antihepatotoxic

PHYTOSTEROL	Seed	--	560.0	*
SITOSTEROL	Seed	--	500.0	*
5-METHYLTHIO-PENTANENITRILE	Hs	--	--	*
BENZYL-BENZOATE	Hs	--	--	*

Activities (17)

Acaricide LD50=9.22 ug/sq cm cf DEET at 37.59 ug/sq cm

Allergenic	Martindale's 29th
Antiasthmatic	
Antidysmenorrheic	
Antispasmodic	
Antitumor ED50=8-15	Jung, J.H., Pummangura, S., Chaichantipyuth, C., Patarapanich, C., and McLaughlin, J.L. 1989. <i>Bioactive Constituents of Melodorum fruticosum.</i> <i>Phytochemistry.</i> 29(5): 1667-1670. 1990.
Artemicide LC50=2 ppm	Jung, J.H., Pummangura, S., Chaichantipyuth, C., Patarapanich, C., and McLaughlin, J.L. 1989. <i>Bioactive Constituents of Melodorum fruticosum.</i> <i>Phytochemistry.</i> 29(5): 1667-1670. 1990.
CNS-Depressant	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. <i>Compendium of Safety Data Sheets for Research and Industrial Chemicals.</i> VCH Publishers, New York. 3560-4253.
CNS-Stimulant	Martindale's 29th
FLavor FEMA 40-300	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Hypotensive	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. <i>Compendium of Safety Data Sheets for Research and Industrial Chemicals.</i> VCH Publishers, New York. 3560-4253.
Insectifuge	Martindale's 29th
Irritant	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. <i>Compendium of Safety Data Sheets for Research and Industrial Chemicals.</i> VCH Publishers, New York. 3560-4253.
Myorelaxant	
Pediculicide	Martindale's 29th
Pesticide	
Scabicide	Merck 11th Edition

3-OCTANONE

Hs -- -- *

HEXANOIC-ACID

Hs -- -- *

Activities (2)

Acidulant	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.
FLavor FEMA 2-450	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

4-METHYLBUTYL-ISOTHIOCYANATE

Hs -- -- *

DODECANOL

Hs -- -- *

Activities (1)

FLavor FEMA 1-30	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
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BENZYL-ALCOHOL

Hs -- -- *

Activities (9)

Allergenic	Martindale's 29th
Anesthetic	Martindale's 28th
Antiodontalgic	Martindale's 28th
Antipruritic	
Antiseptic	Martindale's 29th
FLavor Fema 200-1,200	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Fungicide	
Pesticide	
Sedative	Jim Duke's personal files.

ISORHAMNETIN-3-GLUCOSIDE

Leaf -- -- List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities (1)

Hepatoprotective	Advance in Chinese Medicinal Materials Research. 1985. Eds. H. M. Chang, H. W. Yeung, W. -W. Tso and A. Koo. World Scientific Publishing Co., Philadelphia Pa., page 210.
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3-OCTANOL

Hs -- -- *

Activities (2)

FLavor FEMA	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

HEXANAL

Hs -- -- *

Activities (5)

Antibacterial MBC=800 ug/ml	
Antisalmonella MIC=400 ug/ml	
Antiseptic 400-800 ug/ml	
FLavor FEMA <1-5	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Pesticide	

4-METHYL-THIO-BUTYL-GLUCOSINOLATE

Leaf -- -- *

DODECANAL

Hs -- -- *

Activities (2)

FLavor FEMA 1-100	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Irritant	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.

BENZALDEHYDE

Hs -- -- *

Activities (24)

Allergenic
Anesthetic
Antibacterial
Anticancer
Antimutagenic
Antipeptic
Antiseptic
Antispasmodic
Antitumor
Candidicide

FLavor FEMA 150-800 Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

Immunostimulant

Insecticide Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Insectifuge 50 ppm J. Stored. Prod. Res., 22:141, 1986.

Motor-Depressant Buchbauer et al, e.g.Buchbauer et al,1993.Therapeutic properties of essential oils and fragrances, Chap.12 in Teranishi,R, Buttery,R.G and Sugisawa,H. Eds. Bioactive Volatile Compounds from Plants. ACS Symposium Series 525. Amer. Chem. Soc., Washington DC

Narcotic Merck 11th Edition

Nematicide Shoyakugaku Zasshi, 44: 183.
MLC=1 mg/ml

Pesticide

Sedative Buchbauer et al, e.g.Buchbauer et al,1993.Therapeutic properties of essential oils and fragrances, Chap.12 in Teranishi,R, Buttery,R.G and Sugisawa,H. Eds. Bioactive Volatile Compounds from Plants. ACS Symposium Series 525. Amer. Chem. Soc., Washington DC

Termiticide LD100=5 mg/g

Tyrosinase-Inhibitor ID50=820 uM

Tyrosinase-Inhibitor ID50=87 ug/ml

Tyrosinase-Inhibitor ID50=0.82 mM

Tyrosinase-Inhibitor ID50=830 uM

ISORHAMNETIN

Leaf -- --

List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities (11)

Antibacterial

Antihistaminic Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Antiinflammatory Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Antioxidant Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Antispasmodic Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Cancer-Preventive Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.

Hepatoprotective Advance in Chinese Medicinal Materials Research. 1985. Eds. H. M. Chang, H. W. Yeung, W. -W. Tso and A. Koo. World Scientific Publishing Co., Philadelphia Pa., page 210.

MAO-Inhibitor

Pesticide

Quinone-Reductase-Inducer Yannai, S., Day, A. J., Williamson, G., Rhodes, M. J. C. 1998. Characterization of Flavonoids as Monofunctional or Bifunctional Inducers of Quinone Reductase in Murine Hepatoma Cell Lines. Food Chem Toxicol, 36(8): 623-630.

Vasodilator

2-OCTANOL

Hs -- -- *

Activities (1)

Perfumery Merck 11th Edition

HEXADECANOL

Hs -- -- *

Activities (1)

FLavor FEMA<1-2 Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

QUERCETIN-3-(2-SINAPOYL-O-BETA-D-GLUCOPYRANOSYL)-3'- (6-SINAPOYL-O-BETA-D-GLUCOPYRANOSYL)-4'-O-BETA-D- GLUCOPYRANOSIDE	Leaf	--	--	*
4-METHYL-SULFINYL-GLUCOSINOLATE	Leaf	--	--	*
DECANOL	Hs	--	--	*
Activities (2)				
Nematicide MLC 100-700 ug/ml	Shoyakugaku Zasshi, 44: 183.			
Pesticide				
QUERCETIN-3,3',4'-TRI-O-BETA-D-GLUCOPYRANOSIDE	Leaf	--	--	*
HEXYL-OCTANOATE	Hs	--	--	*
OCTANOL	Hs	--	--	*
HEPTAN-3-OL	Hs	--	--	*
QUERCETIN-3'-(6-SINAPOYL-O-BETA-D-GLUCOPYRANOSYL)- 3,4'-DI-O-BETA-D-GLUCOPYRANOSIDE	Leaf	--	--	*
METHYL-EUGENOL	Hs	--	--	*
Activities (20)				
Anesthetic				
Antibacterial	Internat. J. Oriental Med. 15(4): 199, 1990+			
Anticonvulsant				
Antidote (Strychnine)				
Antifeedant	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.			
Antioxidant EC50=100 ul/l				
Antiradicular EC50=100 ul/l				
Antiseptic				
Cancer- Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.			
Carcinogenic	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.			
FLavor FEMA 5- 15	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry			
Fungicide				
Fungistat 100 ug/ml	Laekeman, G.M., Van Hoof, L., Haemers, A., Vanden Berghe, D.A., Herman, A.G., and Vlietinck, A.J. Eugenol a Valuable Compound for In Vitro Experimental Research and Worthwhile for Further In Vivo Investigation. Phytotherapy Research 4(3): 93, 1990.			
Insectifuge	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.			
Myorelaxant	Fitoterapia No.61: 254, 1990.			
Narcotic				
Nematicide MIC=1 mg/ml	Shoyakugaku Zasshi, 44: 183.			
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry			
Pesticide				
Sedative				
CUMINYL-ALCOHOL	Hs	--	--	*
CIS-3-HEXENYL-2-METHYLBUTANOATE	Hs	--	--	*
OCTANOIC-ACID	Hs	--	--	*
Activities (5)				
Candidicide	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
FLavor FEMA 3- 20	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry			
Fungicide	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Perfumery	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Pesticide				
TRANS,TRANS-2,4-HEPTADIENAL	Hs	--	--	*
METHYL-DODECANOATE	Hs	--	--	*
CUMINALDEHYDE	Hs	--	--	*

Activities (10)

Antibacterial	
FLavor FEMA <1	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Fungicide	Singh*, G., Upadhyay, R.K. 1990. Fungitoxic Activity of Cumaldehyde, Main Constituent of the Cuminum cyminum Oil. <i>Fitoterapia</i> 62(1): 86, 1991.
Irritant	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.
Larvicide	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Perfumery	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Pesticide	
Sedative	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.
Tyrosinase-Inhibitor ID50=0.05 mM	
Ulcerogenic	Zebovitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253.

CIS-3-HEXYNYL-BUTANOATE

Hs -- -- *

ALLYL-ISOTHIOCYANATE

Hs -- -- *

Activities (16)

Allergenic	
Antiasthmatic	
Antifeedant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antimutagenic	Economic & Medicinal Plant Research, 6: 235.
Antiseptic	
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Counterirritant	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Decongestant	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Embryotoxic	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Fungicide MIC=1.8-3.5 ug/ml	
Herbicide IC100=0.4 mM	Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds, Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp.
Insectiphile	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Mutagenic	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Nematicovistat 50 ug/ml	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Pesticide	
Spice FEMA 1-80 ppm	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

NONANOL

Hs -- -- *

GLUCOERUCIN

Seed -- -- *

2-METHYL-ANISOL

Hs -- -- *

BETA-CITRONELLOL

Hs -- -- *

2-PENTYL-FURANE

Hs -- -- *

CIS-3-HEXYNYL-ACETATE

Hs -- -- *

ALKALOIDS

Seed -- -- List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

TRANS-2-NONENAL

Hs -- -- *

FURFURAL

Hs -- -- *

Activities (6)

Antiseptic	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
FLavor FEMA 1-30	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Fungicide	
Insecticide	
Irritant	Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
Pesticide	

4-MERCAPTOBUTYL-GLUCOSINOLATE

Leaf -- -- *

BETA-CARYOPHYLLENE	Hs	--	--	*
4-PENTENYL-ISOTHIOCYANATE	Hs	--	--	*
Activities (1)				
Antimutagenic	Economic & Medicinal Plant Research, 6: 235.			
TRANS-HEXEN-1-OL	Hs	--	--	*
2-ACETYLTHIAZOLE	Hs	--	--	*
NONANOIC-ACID	Hs	--	--	*
Activities (2)				
FLavor FEMA 1-15	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry			
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry			
CARVONE	Hs	--	--	*
Activities (19)				
Allergenic				
Antiacyetylcholinesterase				
IC50=1.4-1.8 mM				
Antiproliferative				
Antiseptic 1.5 x phenol	Wagner & Wolff, eds. 1977. New Natural Products (RS164. I56. 176)			
CNS-Stimulant				
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.			
Candidstat				
Carminative	Yamamoto, A., Umemori, S., and Muranishi, S. 1993. Absorption Enhancement of Intrapulmonary Administered Insulin by Various Absorption Enhancers and Protease Inhibitors in Rats. <i>J. Pharm. Pharmacol.</i> 46: 14-18, 1994.			
FLavor FEMA 80-3,000	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry			
Fungistat				
Insecticide	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.			
Insectifuge	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.			
Motor-Depressant	Buchbauer et al, e.g.Buchbauer et al,1993.Therapeutic properties of essential oils and fragrances. Chap.12 in Teranishi,R, Buttery,R.G and Sugisawa,H. Eds. Bioactive Volatile Compounds from Plants. ACS Symposium Series 525. Amer. Chem. Soc., Washington DC			
Nematicide MLC=1 mg/ml	Shoyakugaku Zasshi, 44: 183.			
Perfumery	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Pesticide				
Sedative	Buchbauer et al, e.g.Buchbauer et al,1993.Therapeutic properties of essential oils and fragrances. Chap.12 in Teranishi,R, Buttery,R.G and Sugisawa,H. Eds. Bioactive Volatile Compounds from Plants. ACS Symposium Series 525. Amer. Chem. Soc., Washington DC			
Trichomonicide LD100=300 ug/ml				
Vermicide				
CIS-HEXEN-1-OL	Hs	--	--	*
ACETOPHENONE	Hs	--	--	*
Activities (6)				
Antibacterial				
Fungicide	Tomas-Barberan, F., Iniesta-Sanmartin, E., Tomas-Lorente, F., and Rumbero, A. 1989. Antimicrobial Phenolic Compounds From Three Spanish Helichrysum Species. <i>Phytochemistry</i> . 29(4): 1093-1095. 1990.			
Hypnotic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.			
Perfumery FEMA <10,000				
Pesticide				
Soporific	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry			
NONANAL	Hs	--	--	*
BETA-FARNESOL	Hs	--	--	*
CARVEOL	Hs	--	--	*
Activities (1)				
CNS-Stimulant				
TRANS-2-HEXENAL	Hs	--	--	*

Activities (4)

FLavor FEMA 0.7-20	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Paramecicide	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Pesticide	
Prosticide	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.

ACETIC-ACID

Hs -- -- *

Activities (16)

Acidulant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antibacterial 5,000 ppm	
Antitotic	Martindale's 28th
Antisalmonella	
Antivaginitic 1-2%	
Expectorant	Martindale's 28th
Fungicide	Martindale's 29th
Keratitogenic	
Mucolytic	Martindale's 29th
Osteolytic	
Perfumery FEMA 6,000-40,000 ppm	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry
Pesticide	
Protisticide	Martindale's 29th
Spermicide	Martindale's 28th
Ulcerogenic	HerbalGram No. 20, page 9.
Verrucolytic	

UNDECANAL

Hs -- -- *

Activities (2)

FLavor FEMA 1-60	
Perfumery	Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

5-METHYLTHIO-PENTYL-ISOTHIOCYANATE

Hs -- -- *

DELTA-CADINENE

Hs -- -- *

Activities (9)

Aldose-Reductase-Inhibitor	
Antiacne	
Antibacterial MIC800 ug/ml	Muroi, H. and Kubo, I. 1993. Combination Effects of Antibacterial Compounds in Green Tea Flavor against Streptococcus mutans. J. Agric. Food Chem. 41: 1102-1105.
Anticariogenic MIC800 ug/ml	Muroi, H. and Kubo, I. 1993. Combination Effects of Antibacterial Compounds in Green Tea Flavor against Streptococcus mutans. J. Agric. Food Chem. 41: 1102-1105.
Antistreptococcic	
Cytochrome-P450-Inducer	
P450-Inducer	
Pesticide	
Testosterone-Inducer	

LIMONENE

Hs -- -- *

Activities (60)

AChE-Inhibitor	Grundy, D. L. and Still, C. C., Inhibition of acetylcholinesterases by pulegone-1,2-epoxide, <i>Oest. Biochem. & Physiol.</i> , 23, 1985, 383-8.
Acaricide LC100=8 uM	
Allelochemical	
Allergenic 1/20th carene	
Antiacetylcholinesterase IC22-26=1.2 mM	
Antiadenomic	
Antialzheimeran?	Grundy, D. L. and Still, C. C., Inhibition of acetylcholinesterases by pulegone-1,2-epoxide, <i>Oest. Biochem. & Physiol.</i> , 23, 1985, 383-8.
Antiasthmatic	
Antibacterial	Revista Itiliana Eppos, 12: 5, 1994.
Anticancer	
Antiesophagitic	
Antifeedant	
Antiflu	Economic & Medicinal Plant Research, 5: 195.
Antiinflammatory	
Antilithic	
Antilymphomtic	
Antimetastatic (Stomach)	
Antimutagenic	Economic & Medicinal Plant Research, 6: 235.
Antiobesity	
Antiseptic	
Antispasmodic ED50=0.197 mg/ml	Fitoterapia No.59-1984.
Antitumor	
Antitumor (Breast)	
Antitumor (Colon)	
Antitumor (Pancreas)	
Antitumor (Prostate)	
Antitumor (Stomach)	
Antiviral	
Apoptotic	
Bronchoprotectant	
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Candidstat	
Chemopreventive	
Cholesterolytic	
Detoxicant	
Enterocontractant	J. Aromatherapy 4: 22.
Expectorant	
FLavor	
Fungiphilic	J. Agric. Food Chem. 43: 2283.
Fungistat	
GST-Inducer	
Herbicide IC50=45 uM	Keeler, R.F. and Tu, A.T. eds. 1991. Toxicology of Plant and Fungal Compounds. (Handbook of Natural Toxins Vol. 6) Marcel Dekker, Inc. NY. 665 pp.
Histaminic	
Immunomodulator	
Insecticide 0.37 uM/fly	
Insectifuge	Jacobson, M., Glossary of Plant-Derived Insect Deterrents, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.
Interleukin-6-Inhibitor	
Irritant	
Lipolytic	
Myorelaxant 50 mg/kg	
NO-Genic	
Nematicide IC=100 ug/ml	Nigg, H.N. and Seigler, D.S., eds. 1992. Phytochemical Resources for Medicine and Agriculture. Plenum Press, New York. 445 pp.
Ornithine-Decarboxylase-Inhibitor ~750 mg/kg (diet)	
Ozone-Scavenger	
P450-Inducer	
Peristaltic	
Pesticide	
Photosensitizer	Rinzler, C. A. 1990. The Complete Book of Herbs, Spices and Condiments. Facts on File, New York. 199 pp.
Sedative ED=1-32 mg/kg	Wagner & Wolff, eds. 1977. New Natural Products (RS164. I56. 176)
Transdermal	

1-OCTEN-3-OL

Hs -- -- *

HEXANOL

Hs -- -- *

Activities (3)

Antiseptic

FLavor FEMA 0.2-25

Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

Pesticide

ACETALDEHYDE

Hs -- -- *

Activities (6)

Addictive 8 ug/kg

Science News, 145: 294.

Fungicide

Perfumery FEMA 4-25

Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

Pesticide

Respiraparalytic

Tyrosinase-Inhibitor ID50=43 ug/ml

TETRAHYDROTHIOPHENE

Hs -- -- *